



# Chemical Stockpile Emergency Preparedness Program

Fiscal Year 2015 Report to Congress

February 10, 2016



Homeland  
Security

*Federal Emergency Management Agency*

# Message from the Administrator



I am pleased to present the Chemical Stockpile Emergency Preparedness Program (CSEPP) Fiscal Year (FY) 2015 Report to Congress, which has been prepared by the Federal Emergency Management Agency (FEMA).

This document has been compiled in response to requirements set forth in title 50 of the United States Code (U.S.C.) § 1521(e)(2)(C), which directs that “Not later than December 15 of each year, the Administrator shall transmit a report to Congress on the activities carried out under this paragraph during the fiscal year preceding the fiscal year in which the report is submitted,” and 50 U.S.C. §

1521(i)(2)(B), which requires that the report contain “[a] site-by-site description of actions taken to assist State and local governments (either directly or through the Federal Emergency Management Agency) in carrying out functions relating to emergency preparedness and response in accordance with subsection (e) of this section.”

Pursuant to congressional requirements, this report is being provided to the following Members of Congress:

The Honorable John McCain  
Chairman, Senate Committee on Armed Services

The Honorable Jack Reed  
Ranking Member, Senate Committee on Armed Services

The Honorable Mac Thornberry  
Chairman, House Committee on Armed Services

The Honorable Adam Smith  
Ranking Member, House Committee on Armed Services

The Honorable Thad Cochran  
Chairman, Senate Appropriations Subcommittee on Defense

The Honorable Richard J. Durbin  
Ranking Member, Senate Appropriations Subcommittee on Defense

The Honorable Rodney Frelinghuysen  
Chairman, House Appropriations Subcommittee on Defense

The Honorable Pete Visclosky  
Ranking Member, House Appropriations Subcommittee on Defense

Inquiries relating to this report may be directed to me at (202) 646-3900.

Sincerely,

A handwritten signature in blue ink, appearing to read 'W. Craig Fugate', with a long horizontal flourish extending to the right.

W. Craig Fugate, Administrator  
Federal Emergency Management Agency

## Executive Summary

The Chemical Stockpile Emergency Preparedness Program (CSEPP) is a whole community partnership that unites FEMA, the U.S. Army, multiple Federal departments and agencies, two states (Colorado and Kentucky), dozens of local governments, volunteer organizations, and the private sector. As described in the CSEPP Strategic Plan (November 2013), its mission is to “enhance existing local, installation, tribal, state, and Federal capabilities to protect the health and safety of the public, workforce, and environment from the effects of a chemical accident or incident involving the Department of the Army chemical stockpile.” In FY 2015, CSEPP continued to fulfill that mission.

While the Army continues to construct disposal facilities and test systems that will destroy chemical weapon stockpiles at the two remaining CSEPP sites—Pueblo Chemical Depot (PCD) in Colorado, and Blue Grass Army Depot (BGAD) in Kentucky—the risks to the communities from the storage of chemical agents remain. FEMA is committed to maintaining its preparedness mission until the chemical stockpiles are destroyed.

During its 26-year history, CSEPP completed its mission at six of the original eight continental chemical stockpile sites, and program funding has left these communities better prepared to respond to any hazard or emergency. During FY 2015, preparedness goals in the last two CSEPP communities were met through collaborative program management, including integrated process teams that brought together all stakeholders to identify program needs, develop alternatives, and implement solutions.

Specific CSEPP accomplishments in Colorado and Kentucky during the fiscal year include:

- Designing, renovating, and constructing seven emergency operations centers (EOCs);
- Maintaining and enhancing interoperable emergency communications systems;
- Conducting two full-scale emergency exercises (jointly managed by the Army and FEMA) and finalizing after-action reports with corrective action plans;
- Educating at-risk residents on emergency protective actions and training emergency management and response personnel;
- Conducting Integrated Public Alert and Warning System (IPAWS) testing with three CSEPP counties in partnership with the U.S. Department of Defense’s Joint Interoperability Test Command (JITC);
- Publishing the *Guide to Implementing the Integrated Public Alert and Warning System (IPAWS)* for CSEPP communities; and

- Extending the Estill County siren system to enhance coverage of the Immediate Response Zone in Kentucky.

These activities exemplify FEMA’s mission “to support our citizens and first responders to ensure that as a Nation we work together to build, sustain, and improve our capability to prepare for, protect against, respond to, recover from, and mitigate all hazards.”

This report includes an overview of the status of the program, a summary of significant program accomplishments at the Federal level, and a description of the status and accomplishments of the two CSEPP communities.



# Chemical Stockpile Emergency Preparedness Program Fiscal Year 2015 Report to Congress

## Table of Contents

I.	Legislative Requirements .....	1
II.	Background.....	2
III.	Program History .....	3
	Collaboration .....	3
	Funding Administration .....	4
	The CSEPP Environment.....	6
IV.	Results .....	9
	CSEPP Management System .....	9
	Risk Reduction.....	9
	CSEPP Benchmarks.....	9
V.	Summary of Significant Activities .....	13
	Administration .....	13
	Alert and Notification .....	14
	Automation .....	16
	Communications .....	16
	Coordinated Plans .....	17
	Emergency Operations Centers.....	18
	Exercises .....	18
	Medical .....	19
	Personnel.....	20

Protective Actions.....	20
Public Outreach and Education.....	22
Training.....	22
VI. Conclusion.....	24
Appendix A: Colorado .....	26
Fiscal Year 2015 Accomplishments .....	27
Appendix B: Kentucky.....	34
Fiscal Year 2015 Accomplishments .....	35
Appendix C: CSEPP Stakeholders.....	42
State of Colorado .....	42
Commonwealth of Kentucky .....	42
Appendix D: Abbreviations .....	43

# I. Legislative Requirements

The U.S. Department of Homeland Security (DHS), Federal Emergency Management Agency (FEMA) submits the Fiscal Year (FY) 2015 Annual Report to the U.S. Congress in accordance with the requirements set forth in title 50 of the United States Code (U.S.C.) § 1521(e)(2)(C), which states:

*Not later than December 15 of each year, the Administrator shall transmit a report to Congress on the activities carried out under this paragraph during the fiscal year preceding the fiscal year in which the report is submitted.*

In addition, 50 U.S.C. § 1521(i)(2)(B) requires that the report contain:

*[a] site-by-site description of actions taken to assist State and local governments (either directly or through the Federal Emergency Management Agency) in carrying out functions relating to emergency preparedness and response in accordance with subsection (e) of this section.*

Pursuant to subsection 1521(e), the Department of the Army and FEMA entered into a memorandum of understanding (MOU) whereby the Army provides funds to FEMA to support the Chemical Stockpile Emergency Preparedness Program (CSEPP) mission of assisting state and local governments to carry out functions related to off-post emergency preparedness and response in communities surrounding military installations that store and dispose of lethal chemical warfare agents and munitions. The Army retained responsibility for all related on-post activities.

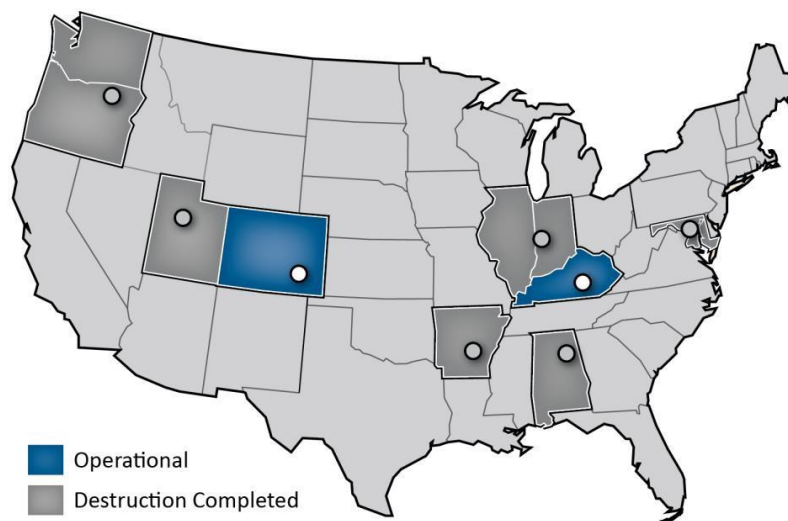
This report reflects the status of FEMA activities implemented in support of CSEPP to provide maximum protection for residents in the two States (Colorado and Kentucky), and 11 counties that participated in CSEPP in FY 2015. The status of on-post risk reduction activities implemented by the Army can be found in the U.S. Department of Defense's (DoD) *Annual Status Report on the Destruction of the United States Stockpile of Lethal Chemical Agents and Munitions for Fiscal Year 2015*.



## II. Background

CSEPP is a unique whole community partnership whose participants share a common goal: to prepare and enable communities to protect residents in the unlikely event of a chemical emergency at the Nation's two remaining chemical stockpile sites. CSEPP's vision is "a fully prepared team of local, installation, tribal nation, state, and Federal professionals developing and executing an effective emergency preparedness and response program." To fulfill this vision, CSEPP's mission is "to enhance existing local, installation, tribal, State, and Federal capabilities to protect the health and safety of the public, workforce, and environment from the effects of a chemical accident or incident involving the U.S. Army chemical stockpile."

Figure 1 illustrates chemical stockpile locations that remain operational, as well as locations where destruction of the stockpile has been completed.



**Figure 1: Current and Previous Chemical Stockpile Locations**

In FY 2015, CSEPP focused on the remaining stockpiles at Pueblo Chemical Depot (PCD) in Colorado, and Blue Grass Chemical Activity at Blue Grass Army Depot (BGAD) in Kentucky. CSEPP activities in Colorado are detailed in Appendix A and activities in Kentucky are detailed in Appendix B.

In FY 2015, the States of Colorado and Kentucky and 11 counties surrounding the stockpile locations participated in CSEPP. Three of these counties are in immediate response zones (IRZs), generally within a six-mile radius of where chemical warfare agents are stored. Six counties are in protective action zones (PAZs), outside the IRZs but within six to 31 miles of stockpile locations. The remaining two counties are designated as host counties; they are not at direct risk from a chemical stockpile accident, but instead provide decontamination and medical treatment, mass care, host facilities, and mutual aid support to at-risk jurisdictions. Specific active program partners are listed in Appendix C.

### III. Program History

FEMA began providing preparedness assistance to communities near chemical stockpile sites in August 1988 through an MOU with the Army. Under this agreement, the Army provides for protection of personnel at its chemical depots (on-post) and provides funding to FEMA to assist state and local governments in carrying out functions related to emergency preparedness and response in the communities surrounding the depots (off-post). This enhances the abilities of the civilian communities neighboring the CSEPP sites to respond to potential chemical warfare agent emergencies. The MOU also established a framework for collaborating with potentially affected state, local, and tribal governments to provide for public health and safety; identify roles and responsibilities; and establish joint program efforts in planning, training, exercising, and exchanging information. The MOU has been reaffirmed and revised over the years as the program matured; a 1997 revision (reaffirmed in 2004) gave FEMA responsibility and accountability for all aspects of off-post emergency preparedness.

#### **CSEPP Fiscal Year 2015 Stakeholders**

- Pueblo Chemical Depot
- Blue Grass Army Depot
- The State of Colorado
- The Commonwealth of Kentucky
- One county in Colorado
- Ten counties in Kentucky
- Residents of and businesses in CSEPP communities
- Federal facilities in the hazard zone
- U.S. Congress
- U.S. taxpayers
- Nonprofit and nongovernmental organizations
- Public and private sector agencies

CSEPP also operates under a strategic plan that reflects a coordinated effort between the Army's Chemical Materials Activity (CMA) and FEMA's Technological Hazards Division to develop and implement a customer-centered planning process. The plan contains a mission statement, goals and objectives, performance goals within 12 benchmark capabilities (which provide the structure for this Report), the identification of key external factors that could affect achievement of the plan's goals and objectives, and an evaluation program.

### Collaboration

Working in a collaborative environment with State and local partners, FEMA is responsible for the following tasks:

- Assisting states and counties to identify program needs and develop long-term budget goals and objectives;
- Administering off-post CSEPP funds;

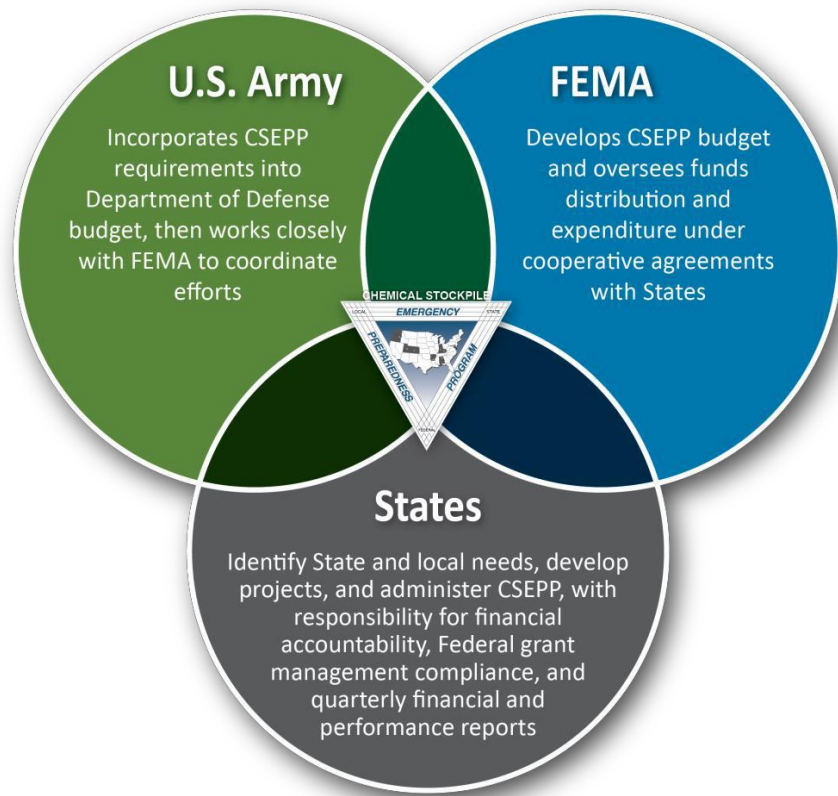
- Supporting CSEPP States to develop response plans;
- Developing, delivering, and evaluating training;
- Providing technical assistance; and
- Developing programs for evaluating off-post readiness including a robust exercise program jointly managed by FEMA and the Army.

## **Funding Administration**

FEMA is engaged with state and local partners throughout the budget and funding administration cycle, including helping to assess program needs, developing and validating budgets, administering program funds, and closing out a site once the chemical destruction mission is completed.

CSEPP is administered through the states. FEMA validates off-post preparedness requirements and develops a budget in coordination with State, local, and tribal governments. These budget requests are then incorporated into DoD's budget submission to Congress. Once funds are appropriated, the Army transfers funds to FEMA, which has full authority and responsibility for their distribution and expenditure. FEMA and the Army continue to cooperate closely and coordinate their efforts. Program management performance is maintained through regular joint meetings; common budgeting, cost accounting, and performance management systems; and aggressive program integration efforts (see Figure 2).

FEMA distributes funds to the States under CSEPP cooperative agreements (CAs) that include annual work plans negotiated between each State and its FEMA Regional office. Under these CAs, each State identifies its needs, develops proposed projects to meet those needs, requests funds from FEMA, and disburses these funds to the various State offices and local governments involved in the proposed projects. The States are responsible for financial accountability, adherence to Federal grant management rules, and providing quarterly financial reports and narrative performance reports addressing the capability improvement realized through the funds. Local governments are sub-recipients of these funds.



**Figure 2: CSEPP Program Integration**

From CSEPP’s inception in 1988 through the end of FY 2015, approximately \$1.3 billion has been allocated to states and the Confederated Tribes of the Umatilla Indian Reservation (CTUIR) under annual CAs or through FEMA-managed contracts. Allocation of resources is tracked according to the CSEPP organization (including the Army and FEMA) that spends the funds rather than the jurisdiction that benefits from the service. Therefore, the amount of funds spent at the state level does not include Federal expenditures on contract support to the communities (i.e., for engineering and training services) and does not necessarily reflect the complete set of benefits that communities have received through CSEPP.

Total funding amounts in Table 1 represent combined totals for direct award funds and funding for contracts managed by FEMA Headquarters on behalf of CSEPP states and the CTUIR. Direct award funds represent amounts sent directly to States and the CTUIR via FEMA CAs and one Army CA sent directly to the CTUIR in FY 2002. FEMA-managed contracts include contracts managed by FEMA on behalf of states or amounts FEMA awarded to the U.S. Army Corps of Engineers (USACE) for collective protection projects in the communities. These funds represent a combination of actual expenditures and funds remaining to expend.

## The CSEPP Environment

CSEPP depends upon multiple programmatic, technological, collaborative, regulatory, and societal factors that stakeholders must consider if the program is to meet its goals and operate effectively.

### Programmatic Factors

Effective risk analysis and planning require strong and continuous commitment from States and individual communities. To present and defend their annually updated lifecycle cost estimates (LCCs), those agencies developing CSEPP budgets must ensure funding requirements are valid and must maintain fully operational CSEPP efforts through the end of destruction operations at each stockpile site. Delays and extensions of the stockpile destruction mission will necessitate continued CSEPP operations and will increase the cost of the program beyond projections.

### Technological Factors

Emergency preparedness and response capabilities must be evaluated, updated, and maintained to achieve full operational readiness through the end of destruction operations. Continued research and ongoing development of new technologies in interoperable public safety communications systems, public alert and notification systems (including the Integrated Public Alert and Warning System (IPAWS)), and emergency management automation systems continue to produce new and expanded requirements for technology. The overall costs and benefits of replacing current technology with new systems, however, must be carefully weighed to ensure prudent stewardship of taxpayer funds. CSEPP conducts cost-benefit analyses for upgrades, replacements, and maintenance to ensure operational readiness and compliance with changing Federal requirements. When approved, CSEPP implements these changes in a regionalized, interoperable manner.

### Collaborative Factors

The partnership between FEMA and the Army is supported by the Environmental Protection Agency (EPA), the Centers for Disease Control and Prevention (CDC), the Occupational Safety and Health Administration (OSHA), and other Federal agencies. This partnership and coordination enable government officials to collectively assess the needs of CSEPP communities and determine comprehensive guidance. This coordination is also crucial to resolving issues including:

**Table 1: CSEPP Off-post Funds (Includes Direct Awards and FEMA-Managed Contracts)**

State/Tribe	FY 2015	FY 1989–2014
Alabama	\$0	\$399,331,706
Arkansas	\$0	\$117,540,263
Colorado	\$5,543,830	\$88,142,548
Illinois	\$0	\$12,013,874
Indiana	\$0	\$56,215,924
Kentucky	\$10,199,803	\$240,322,370
Maryland	\$0	\$31,220,632
Oregon	\$0	\$161,203,624
Utah	\$0	\$123,761,112
Washington	\$0	\$77,141,706
CTUIR	\$0	\$6,606,173
<b>Totals</b>	<b>\$15,743,633</b>	<b>\$1,313,499,932</b>

1. Identifying appropriate Permissible Exposure Limits (PELs) for workers, or identifying other occupational exposure limits (such as National Institute for Occupational Safety and Health recommended exposure limits or American Conference of Governmental Industrial Hygienists Threshold Limit Values) when OSHA has not established a PEL;
2. Establishing protocols for emergency workers;
3. Identifying health and safety standards for personal protective equipment (PPE);
4. Identifying appropriate published exposure limits or guidelines for off-post community populations (such as Acute Exposure Guideline Levels); and
5. Exploring the roles and responsibilities of multiple Federal, state, and local agencies specific to long-term recovery from a chemical warfare agent incident.

With respect to the first three bullets, the Kentucky (but not Colorado) CSEPP Community is located in an OSHA-approved State Plan state, where an OSHA-approved, State-operated safety and health program, instead of Federal OSHA, provide safety and health standards for private and public sector workers. See <http://www.osha.gov/dcsp/osp/index.html> for more information.

### **Regulatory Factors**

The uniform Federal grant rules published in FY 2014 by the Office of Management and Budget modified the regulatory structure under which CSEPP CA funds are awarded and managed. These regulations were primarily intended to eliminate duplicative Federal guidance and focus on performance over compliance for accountability, but their primary CSEPP impact is expected to be felt in the strengthening of State oversight authority as the “pass-through entity” for these Federal funds. The respective grants management roles of Federal and State CSEPP officials is a critical component of the partnership between FEMA, Kentucky Emergency Management, and the Colorado Division of Homeland Security and Emergency Management.

### **Societal Factors**

It is important to engage the whole community in preparing for, responding to, recovering from, and mitigating disasters. The whole community concept is a means by which residents, emergency management practitioners, organizational and community leaders, and government officials can collectively understand and assess the needs of their communities and determine the best ways to organize and strengthen their assets, capacities, and interests. Doing so builds a more effective path to societal security and resilience.

Throughout its history, CSEPP has endeavored to be inclusive of the whole community and support the diversity of organizations and populations in the communities the program serves. For example, as part of the program’s efforts to address and involve individuals with disabilities and others with access and functional needs, including persons with limited English proficiency, the requirements under Executive Order 13166: “Improving Access to Services for Persons with



Limited English Proficiency (LEP)” are specifically reflected in CSEPP’s functional guidance on community planning and public affairs. The Colorado and Kentucky CSEPP communities include LEP populations, most notably Spanish-language speakers. U.S. Census data estimate the LEP community in the Pueblo CSEPP emergency planning zone (EPZ) to be 374 individuals (4.4 percent of the nighttime population) and the LEP community in the Blue Grass CSEPP EPZ to be 1,093 individuals (0.9 percent of the nighttime population). Examples of CSEPP’s technical assistance, grant funds, and training to support the LEP community are given in this report.

CSEPP also engages the whole community by using integrated process teams (IPTs) in each community. The use of IPTs—composed of CSEPP leaders who represent Federal, State, and local organizations—as a program management tool was authorized by Congress and is implemented under the joint FEMA-Army MOU. IPTs provide common solutions and consistency of approaches across CSEPP communities and produce products and tools of immediate value, not only to CSEPP but also to the broader emergency preparedness field.

Programmatic policy is developed with input from IPTs that include Colorado and Kentucky CSEPP stakeholders. Outputs from these groups are forwarded to FEMA and Army CSEPP program management for consideration. Specific guidance documents have been developed by IPTs and approved by program leaders. Since the documents were developed by working groups of stakeholders, concurrence was achieved long before the guidance was approved and officially implemented. The Pueblo and Blue Grass CSEPP communities each have their own IPT, as well as sub-IPTs. In addition, there are national IPTs that correlate with specific CSEPP benchmarks. (See Table 2 for a complete list of working groups.)

**Table 2: Current CSEPP Working Groups**

Functional Working Groups	Community Working Groups
<ul style="list-style-type: none"> <li>▪ Automation</li> <li>▪ Exercise Work Group</li> <li>▪ Medical Work Group</li> <li>▪ Public Affairs</li> </ul>	<p>Pueblo Community</p> <ul style="list-style-type: none"> <li>▪ Automation Work Group</li> <li>▪ Exercise Steering Group</li> <li>▪ Recovery Series Exercise Planning Group</li> <li>▪ Medical Preparedness Work Group</li> <li>▪ Public Affairs Work Group</li> <li>▪ Training Work Group</li> <li>▪ Closeout Planning Work Group</li> </ul> <p>Blue Grass Community</p> <ul style="list-style-type: none"> <li>▪ Medical Quality Improvement Team</li> <li>▪ Integrated Public Alert and Warning System Work Group</li> <li>▪ Public Affairs Work Group</li> <li>▪ Exercise Planning Team</li> </ul>

## IV. Results

### CSEPP Management System

CSEPP focuses on providing the resources necessary to establish preparedness and response infrastructures that enable State and local emergency managers to warn the public quickly; manage the response; and communicate with emergency responders, the public, and the media. A key CSEPP management principle focuses on the concept of “functional equivalency,” whereby resources are provided to each site to develop capabilities under the 12 programmatic benchmarks defined by CSEPP (discussed below).

As Grantor, FEMA has a fiduciary responsibility to carefully evaluate and validate requests from States and communities for delivering necessary resources to local communities facing the most significant potential threats. FEMA strives to ensure cost-efficiency in procurement and interoperability among major systems that benefit multiple jurisdictions, which, in many cases, means State-level procurement of alert and notification, communications, and automation systems. FEMA also maintains effective program management at the Federal level to ensure consistent capabilities throughout all CSEPP jurisdictions.

### Risk Reduction

The most effective way to permanently reduce the risk to communities surrounding chemical stockpile sites is to destroy the agents posing the threat. As of the end of FY 2015, stockpiles have been completely destroyed at six sites: the Edgewood Area of Aberdeen Proving Ground (Maryland), Newport Chemical Depot (Indiana/Illinois), Pine Bluff Arsenal (Arkansas), Anniston Army Depot (Alabama), Umatilla Chemical Depot (Oregon/Washington/CTUIR), and Deseret Chemical Depot (Utah). At the two remaining stockpile locations, additional risk reduction during storage has been achieved by taking steps to further secure the stockpile, including reconfiguring the stockpile, reducing potential consequences of lightning strikes and earthquakes, enhancing agent detection and monitoring systems, and installing igloo filtration systems. In addition, during FY 2015, PCD began destruction of pre-identified, problematic mustard agent munitions using the Army’s Explosive Destruction System (EDS). EDS will remain available throughout the life of the main plant to destroy any problematic or reject munitions.

### CSEPP Benchmarks

The December 2012 *CSEPP Program Guidance* describes 12 performance benchmarks “used by Federal, State, and local government organizations to identify the CSEPP capabilities being funded ... [and] in reporting the status of CSEPP to Congress in required annual reports.” Under the CSEPP CA, States are required to report expenditures and performance using these benchmarks. The 12 benchmarks are as follows:



1. **Administration:** Administrative support for each CSEPP installation, state, and county necessary to support their CSEPP preparedness activities;
2. **Alert and Notification:** A functioning alert and notification system extending across the installation and appropriate off-post jurisdictions to communicate protective actions and other critical response information to the public;
3. **Automation:** A functioning automation system for rapid exchange of chemical hazard modeling and protective action analysis between the CSEPP installation, state, and counties;
4. **Communications:** A functioning communications link between the CSEPP installation, state, and county emergency operations centers (EOCs), and the joint information center (JIC) to support coordinated implementation of response plans;
5. **Coordinated Plans:** Coordinated plans for response to hazards from the stockpile for each CSEPP installation, state, and county;
6. **EOC Support:** Functioning EOCs at each CSEPP installation, state, and county to support coordinated implementation of response plans;
7. **Exercises:** An exercise program that effectively tests integrated response capabilities and preparedness;
8. **Medical:** A medical program to support on- and off-post medical preparedness among first responder and receiver organizations for a chemical weapons accident or incident;
9. **Personnel:** Specialized personnel, such as a CSEPP manager, public information officer, planner, and information technology specialist, to support CSEPP activities at CSEPP installations, states, and counties;
10. **Protective Actions:** A protective action strategy for each jurisdiction that is based on the threat from the stockpile, consistent with response plans, and conforms to established CSEPP guidance;
11. **Public Outreach and Education:** A program for coordinated emergency public information and education, including a public outreach/education program to enhance CSEPP awareness and familiarity with the protective action strategy; and
12. **Training:** Training programs, consistent with CSEPP guidance, state and local training plans (for off-post jurisdiction personnel), and Army certification requirements (for installation personnel) that maintain proficiency of emergency services providers/responders and CSEPP staff.

These benchmarks apply to the states and counties and are reflected in CSEPP's strategic plan, CSEPP guidance, LCCEs, annual budgets, quarterly performance reports from grantees, and employee work plans.

To complement the benchmarks, CSEPP developed a performance measurement system that includes four elements:

















































- FEMA leads each community IPT in a biannual update of a community profile describing the status of each community benchmark quantitatively (e.g., number of sirens and message reader boards installed) and qualitatively (e.g., sufficiency of resources to support a capability). The profile enables Federal, state, and local partners to assess the CSEPP community's deficiencies in preparedness, rate each benchmark for effectiveness, and address challenges through remedial action.
- FEMA and the Army jointly direct an annual community exercise (including a review of plans and training) in accordance with the Homeland Security Exercise and Evaluation Program (HSEEP). Within 90 days of the exercise, the exercise co-directors finalize an after-action report that includes observations, findings, and a corrective action plan.
- FEMA reviews the results of community public information surveys to evaluate awareness of the local chemical stockpile hazard and the appropriate protective actions for the public.
- FEMA considers the results of jurisdictional equipment maintenance and testing programs as well as lessons learned from all-hazards community disaster response.

Figure 3 on the following page shows performance measure ratings for the Colorado and Kentucky CSEPP communities for each of the 12 benchmarks.

As the program has continued and basic capabilities have been met, community expectations have increased. Within a given benchmark, a community may decide to focus on a specific challenge as a way to gauge performance on that benchmark. This does not mean that capabilities for that benchmark are incomplete, but it does illustrate where the community's priorities lie. For example, a community may determine that its Coordinated Plans capability is less than complete because its recovery plan needs to be updated to reflect demographic changes. This specific issue would need to be resolved to return to full compliance.

A summary of significant activities in the next section discusses each benchmark from a programmatic level. The progress and status of each CSEPP community during FY 2015 are described in Appendix A (Colorado) and Appendix B (Kentucky).

## Benchmark Compliance

Benchmark	FY 2014		FY 2015	
	CO	KY	CO	KY
Administrative				
Alert & Notification				
Automation				
Communications				
Coordinated Plans				
EOC Support				
Exercises				
Medical				
Personnel				
Protective Actions				
Public Outreach & Education				
Training				




Key:  Benchmark Compliance Achieved  
 Benchmark Not Compliant; Improvement Plan Being Implemented  
 Benchmark Not Compliant; Plan Needs to be Developed

Figure 3: Benchmark Compliance for Colorado and Kentucky

## V. Summary of Significant Activities

Programmatic activities in FY 2015 that support the 12 CSEPP benchmarks are as follows.

### Administration



CSEPP's size and complexity require a measured, cooperative, and inclusive administration to ensure success. These administrative activities include:

- Maintaining the programmatic LCCE for off-post CSEPP;
- Monitoring and assessing program accomplishments using CSEPP's benchmarks;
- Participating in bi-monthly community IPT meetings to assist all stakeholders in identifying program needs and preparing budget requests;
- Maintaining the programmatic LCCE for FEMA, Colorado, and Kentucky;
- Cooperatively negotiating FY 2016 work plans with Colorado and Kentucky that maintain and enhance emergency preparedness based upon chemical stockpile risks;
- Providing staff and contractor support to programmatic and community IPTs and work groups to address technical challenges that arise; and
- Providing programmatic oversight in accordance with the Army-FEMA MOU.

### Federal Grant Regulations

Over the past two years, CSEPP has been working closely with Colorado and Kentucky to ensure that the officials responsible for managing the CSEPP CA understand the requirements of the new Federal grant regulations issued by the Office of Management and Budget. Training courses have been held at both sites with joint attendance by Federal (FEMA Headquarters and Regional), state, and local CSEPP financial and program officers. The relevant administrative changes were also highlighted and discussed at the meetings of the Program Management Team and community IPTs in FY 2015.

### CSEPP WebCA

CSEPP WebCA is a web-based, enterprise-wide system for managing CSEPP CAs throughout the entire grant lifecycle, from application through closeout. System requirements were developed by a user group comprising Federal, state, and local personnel and continue to be refined in response to field experience. CSEPP's benchmarks are integrated into the grant application and reporting processes implemented in CSEPP WebCA.

CSEPP WebCA automates the preparation and submission of CA applications and allows staff at FEMA Regional offices and Headquarters to review and comment on each application. After Headquarters electronically submits funding approvals to the FEMA Region, regional grant staff prepare and process awarding and obligating documentation. CSEPP WebCA automates

quarterly performance and financial reporting, as well as the request, review, and approval of post-award modifications to grants, including reallocations, performance extensions, requests for additional funds, and changes of scope. Finally, at the end of the performance period for each grant, the system is used to prepare closeout reports and make any final adjustments to bring the un-liquidated balance to zero.

As noted above, grantees at six sites have closed out their CSEPP awards. As part of the closeout process, grant managers use CSEPP WebCA's electronic filing cabinet to archive grant-related documents. While each FEMA Region office maintains an official grant file for each grantee, the electronic filing cabinet provides a quick and convenient means of accessing grant information. CSEPP WebCA will be maintained until all CSEPP sites are closed. In September 2015, CSEPP received a two-year Authority to Operate for CSEPP WebCA from DHS.

### **Teams Meetings**

In July 2015, CSEPP convened a Teams Meeting in Richmond, KY, at the Armed Forces Reserve Center adjacent to the Blue Grass Army Depot. The purpose of the meeting was to coordinate and facilitate interaction between different functional areas on cross-cutting topics. On the first day, the Program Management Team, composed of senior FEMA, Army, state, and county CSEPP managers, met to review progress and plan activities for the coming year. The four program work groups and IPTs met in breakout sessions on the second day. The final day consisted of a plenary session of all attendees featuring: a review of team work plans and identification of next steps for common issues; a review of IPAWS implementation in the two CSEPP communities; and presentations on individuals with disabilities and others with access and functional needs in emergency planning (with special emphasis on LEP populations) and shelter-in-place messaging. Participants were enthusiastic about the meeting's effectiveness in sharing information and identifying areas to improve outcomes through direct coordination of group activities.

Throughout the rest of the year, CSEPP held a range of other operational meetings for each of the communities and the IPTs and work groups, as well as budget discussions, training, and sessions with subject-matter experts. A second Program Management Team meeting of Army, FEMA, and Colorado and Kentucky CSEPP stakeholders in February ensured the interests of all CSEPP jurisdictions were programmatically addressed.

### **Alert and Notification**



Providing timely warning to residents of a chemical accident is a critical emergency management function. CSEPP has long supported and maintained robust emergency alert and notification systems in each CSEPP community as its primary means of meeting the congressional mandate of maximum protection for communities, chemical workers, and the environment. Alert and notification occur in two distinct steps: attracting the attention of the public (alert) and providing information concerning appropriate protective actions (notification).

CSEPP alert and notification consists of a network of outdoor and indoor alerting devices in residential dwellings and special facilities that serve populated areas of the IRZs. Examples of outdoor alerting devices include public address-capable sirens and electronic digital roadway signs. An example of an indoor alerting device is a tone alert radio. CSEPP also provides digital telephone, email, and short message service (SMS) text messaging as part of its emergency notification system (ENS). These systems use a combination of landline subscriber telephone information and public registration to transmit messages. CSEPP-provided alert and notification systems may also warn residents of other hazards, such as tornadoes. FEMA provides direct engineering support in the form of government personnel and contractor support to ensure the CSEPP alert and notification systems are properly designed and maintained.

Outreach to and notification and protection of individuals with disabilities and others with access and functional needs, including LEP, have been CSEPP priorities for many years. Tone alert radios and weather alert radios, used to warn residents of any emergencies (including chemical accidents), can support an audible tone and flashing lights that illuminate when activated. These features alert persons with visual and hearing impairments to an emergency. In addition, systems are available for residents to receive voice and text messaging in the event of an emergency. CSEPP worked with the FEMA Office of Disability Integration and Coordination in FY 2012 to produce a video for local and state planners on inclusive emergency preparedness. In addition, each CSEPP state has Spanish-language translators and interpreters in its JIC to assist in communicating emergency instructions to persons with LEP. Sign language interpretation is also available at the JIC in Kentucky. These capabilities are tested during annual exercises.

## **IPAWS**

IPAWS, the Nation's next-generation infrastructure of alert and warning networks, expands on the traditional audio-only radio and television Emergency Alert System (EAS) and facilitates Federal, state, territorial, tribal, and local warning authorities in alerting and warning their communities of any hazard affecting public safety. Both CSEPP sites agreed to pilot test IPAWS to enhance their current alert and warning systems. CSEPP worked with communities, the IPAWS Program Management Office (PMO), and the testing lab of DoD's JITC to develop a comprehensive test plan.

On December 8 and 9, 2014, three CSEPP jurisdictions conducted a test, using several different IPAWS alert authoring tools to generate messages. Information was collected on how selected systems operated and how IPAWS processed the messages. An after-action review followed on December 16 and 17, 2014, outlining recommendations to conduct more tests, exercises, and training; work with the FEMA IPAWS PMO and hardware/software vendors to educate them on the unique needs of the CSEPP communities; and update the CSEPP IPAWS documents. CSEPP best practices and lessons learned have been compiled into a *Guide to Implementing the Integrated Public Alert and Warning System (IPAWS)*. The guide provides information on the development of comprehensive alert and notification plans that include IPAWS. Products and

templates are available on the CSEPP Portal (see below) and are also being distributed by the FEMA IPAWS PMO.

## Automation



### WebPuff™

WebPuff, a web-based system built around the DoD-accredited D2-Puff™ atmospheric dispersion model, enables automated sharing of essential hazard information between Army and off-post EOCs. WebPuff is accredited by the DoD Information Assurance Certification and Accreditation Process and holds a full Authority to Operate, as required under the DoD information assurance initiative. In an emergency, WebPuff serves as a key response coordination tool, as demonstrated during regular community exercises. It exports all unique CSEPP information in a format compliant with the latest private sector standards for information exchange, the common alerting protocol (CAP). This allows states and counties to use existing or planned CAP-compliant commercial all-hazards automation systems to manage the response to a CSEPP event, avoiding the need to train personnel on separate systems and the cost of maintaining a separate CSEPP automation system. A WebPuff Configuration Control Board, with representatives from the Army and local counties, is responsible for overseeing changes to the functional components of WebPuff to ensure the software continues to meet the needs of end-users effectively.

## CSEPP Portal

The CSEPP Portal ([www.cseppportal.net](http://www.cseppportal.net)) is a web-based, information-sharing and collaboration platform using Microsoft SharePoint software. Since 2003, the Portal has provided access to a vast library of information, including Federal program guidance, presentations from stakeholder meetings, site event calendars, and links to partner websites. The Portal also provides a platform for the CSEPP communities, IPTs, and working groups to collaborate remotely on preparedness projects. The public-facing pages of the Portal make the program's technical video training library available to a broader audience. Stakeholder feedback drives updates to Portal functions to ensure the tool meets the needs of the more than 1,000 registered users from CSEPP partner organizations. In September 2015, CSEPP received a two-year Authority to Operate for the CSEPP Portal from DHS.

## Communications



CSEPP funds interoperable communication systems that provide emergency managers and first responders with robust, state-of-the-art equipment to significantly enhance communications during emergencies. These systems link the critical state and local response organizations, including emergency medical services (EMS), fire, police, hospital, and public works. FEMA provides engineering support to assist the communities in maintaining interoperable communications.

During the fiscal year, FEMA provided technical assistance to the Pueblo and Blue Grass CSEPP communities in planning for communication systems upgrades, maintenance programs, and design of new capabilities. Highlights include completion of a microwave project to interconnect the two IRZ counties in Kentucky, P25 compliant public safety radio system and electrical grounding improvements in Kentucky, and completion and acceptance testing of an independent zone controller to support interoperable radio communications in southeastern Colorado. Details on the specific site communications projects are located in Appendices A and B.

## **Coordinated Plans**



CSEPP emergency plans are developed to capture the most effective protective action strategies and procedures for each CSEPP community. CSEPP plans are regularly updated, based upon the latest guidance about the National Incident Management System (NIMS) and the Incident Command System (ICS), and coordinated across the depots and off-post communities. FEMA provides ongoing technical support for planning projects in Colorado and Kentucky, including regular revisions to state and county plans and maintenance of planning template software that supports coordination and compliance with Federal planning standards. In addition, during FY 2015, CSEPP provided technical support for planning initiatives in the communities surrounding Pueblo and Blue Grass. The most significant included a re-assessment of the population at risk in Kentucky due to recent growth in the community and the development of incident-specific plans for each county. Details on these projects are provided in Appendices A and B.

## **Emergency Operations Planning Template (EOPT)**

CSEPP developed the EOPT to support state, local, and tribal jurisdictions in aligning their specialized chemical emergency response plans with NIMS and integrating them into their all-hazards operations plans. The tool is currently in use in six states (including Kentucky), with a user base that includes six tribal nations, 84 counties, 22 cities, and more than 40 other organizations. The EOPT is being tested by CSEPP's sister program, the Radiological Emergency Preparedness Program (REPP), to help jurisdictions participating in that program simplify and update their radiological emergency response plans and mesh these plans with all-hazards plans. The State of Illinois, in cooperation with the REP Program Office and Exelon Corporation, is using the EOPT to develop and deploy a model radiological emergency response plan for local jurisdictions. In September 2015, CSEPP received a two-year Authority to Operate for the EOPT from DHS.



## Emergency Operations Centers



An EOC serves as the central location for emergency management. In these facilities, various response organizations come together to plan and implement emergency response. CSEPP, with local and state contributions, helps fund EOCs, ensuring that communities have necessary facilities to manage an emergency response. During FY 2015, a new EOC opened at the Pueblo Chemical Depot. In Kentucky, EOCs in Clark and Rockcastle counties were moved to new facilities. FEMA also provided extensive financial and technical support for four other new or renovated EOCs still in progress. In particular, FEMA provided engineering personnel to assist with facility design reviews and contractor support from technology firms to help participating states and counties develop system specifications. FEMA Regions IV and VIII personnel conducted environmental and historical preservation reviews to ensure compliance with the National Environmental Policy Act and related Federal laws and executive orders. Details on those projects are located in Appendices A and B.

## Exercises



A robust exercise program is critical in evaluating the planning, training, and operation of an emergency management program. Annual CSEPP exercises are planned and executed by the Army and FEMA and jointly managed by Army and FEMA Regional co-directors. These exercises ensure on-post and off-post responses are properly coordinated across all response partners.

During FY 2015, the full-scale CSEPP exercises in Pueblo on May 6, 2015, and Blue Grass on September 16, 2015, were evaluated by teams of Federal, state, and local personnel. Final Army-FEMA after-action reports recommending corrective actions were distributed across the program within 90 days of the exercise. Over the last 21 years at the eight sites, reports have been prepared on more than 100 full-scale community exercises (and more than a dozen joint tabletop exercises), examining community-wide and jurisdiction-specific practices. This process has resulted in enhancements to depot-to-community emergency notification agreements, mass decontamination practices by fire departments and hospitals, and protocols for community joint information systems (JIS).

With social media becoming increasingly important in emergency management, robust social media play has become a regular feature of CSEPP exercises. At both sites, controller-injected content is displayed in a restricted digital environment that keeps exercise communications secure, enabling emergency management officials to demonstrate a broader range of capabilities than would be possible with just telephone calls. These simulated interactions with the public and media allow participants to test their social media plans and procedures to identify what works well and what improvements may be necessary in an ever-changing medium.

In addition to these annual full-scale exercises, CSEPP jurisdictions participated in the Army's quarterly chemical accident/incident response exercises. Throughout the year, county emergency managers also perform all-hazard or other hazard-specific tabletop and functional exercises. Finally, in Colorado, a series of functional recovery workshops culminated in a tabletop recovery exercise in August, and a similar effort began in Kentucky. Details on the workshops are located in Appendix A.

CSEPP exercise guidance emphasizes the benefits of a jointly managed Army-FEMA exercise program and provides a specific roadmap for planning, executing, evaluation, and assessment of CSEPP exercises. The *CSEPP Exercise Policy and Guidance* maintains consistency with HSEEP. Since many HSEEP precepts are already a part of CSEPP, the two communities have experienced little difficulty in adopting HSEEP methodologies.

CSEPP policy emphasizes using peer evaluators during exercises. This initiative encourages emergency managers and first responders from other jurisdictions to assist in exercise evaluations; more than two dozen individuals took advantage of this opportunity during the two exercises in FY 2015. This approach broadens the knowledge base of evaluators and serves as a method of sharing best practices among the participants. Another notable practice is having emergency management students at Eastern Kentucky University (EKU) work together with evaluators and controllers during the annual Blue Grass Exercise. Details on the collaboration between the program and our university partners are located on page 33 of this report.

## Medical



In FY 2015, CSEPP communities maintained and enhanced their capabilities to treat potential victims of a chemical agent release from an Army chemical weapons facility. This medical readiness is enabled by the active participation of public and private hospitals, state and local health departments, and emergency services organizations in the program.

Federal technical support to these communities is provided by the Army Public Health Center (PHC) and FEMA. CSEPP offers several critical resources:

- Training on PPE, chemical agent hazards, and decontamination and treatment of patients; more than 300 students from EMS and hospitals in Colorado and Kentucky attended a range of medical training sessions during FY 2015;
- Agent-specific pharmaceuticals and PPE for participating organizations; and
- Enhancements to the safety and capabilities of hospital facilities.

In addition, involvement in the annual CSEPP exercise supports hospitals in maintaining their accreditation. In FY 2015, 11 hospitals, as well as the on-post health clinics, demonstrated their capabilities during the annual exercises. A team of health and medical professionals, both

program staff and contractors, is available to evaluate their performance. More details on these activities are provided in Appendices A and B.

For management purposes, the CSEPP Medical Work Group holds open regular teleconferences to support medical planning, training, and exercising. Personnel from EMS, fire, hospitals, and the public health sectors constitute the core members of the work group. Other participants include personnel from the FEMA Regional offices, Army Chemical Materials Activity, Army PHC, and CDC. This collaboration enables FEMA and the Army to continually track and support the medical stakeholders in each community.

## Personnel



Federal, state, county, and local response capabilities must be maintained with a team of qualified professionals. Experienced people are essential to oversee preparedness planning, implement procedures, and coordinate response actions.

CSEPP-funded personnel execute the program on a day-to-day basis, including working to ensure emergency responders are adequately trained and equipped to complete their missions. During the fiscal year, FEMA evaluated and adjusted Federal employee staffing levels in coordination with Army management to ensure program needs were met. In addition, FEMA provided training to ensure personnel have the knowledge necessary to carry out their mission. Building the capacity of program personnel continues to be a CSEPP priority.

## Protective Actions



In general, CSEPP supports a balanced protective actions strategy including evacuation and sheltering-in-place as part of on- and off-post hazard-specific plans. This approach is zone-based because the most effective and appropriate protective action for a specific incident can vary depending upon the distance from the hazard and the time required for a hazard to arrive.

### Sheltering-in-Place

To maximize the effectiveness of available protective actions, CSEPP has conducted studies to determine the best way to protect residents during a chemical emergency. The most recent study, the *Madison County Special Facility Risk Analysis*, focused on newly identified special facilities located within Madison County, KY, including child care centers, outpatient medical facilities, and senior citizen facilities. CSEPP is using these studies to assess the need for enhanced protection of the facilities and to develop improved protective action decision-making tools that assist local emergency managers in directing residents to shelter-in-place. Quantifying the effectiveness of these protective actions has placed emergency decision making on a sound, scientific footing.

Residents have been provided shelter-in-place kits to enhance shelter rooms and decrease possible infiltration of a chemical agent vapor into their homes. Over the course of the program, CSEPP has distributed more than 100,000 shelter-in-place kits in CSEPP communities. In addition, CSEPP continues to distribute copies of its shelter-in-place training videos to residences and businesses.

### **Over-Pressurization of Special Facilities**

Over-pressurization of special facilities or safe areas, combined with air filtration, is a highly effective method of protecting the public and is implemented where it demonstrably reduces risk. Under a memorandum of agreement between FEMA and the Army, the USACE continues to perform specialized maintenance on over-pressurized and enhanced shelter-in-place facilities for specific vulnerable populations near BGAD. This maintenance includes operating the systems, inspecting the systems to ensure that all components are functioning properly, and performing repairs, preventive maintenance, and annual filter tests.

The USACE also issued a contract to begin modifications to the collective protection system at Baptist Health Richmond. This facility, which is undergoing major renovations, is the largest hospital in Madison County and the primary facility for receiving patients from the depot. Modifications to the collective protection systems, in concert with the renovations, will ensure that patients from on- and off-post can be protected and safely treated. With the growth in Madison County, the USACE and FEMA are also meeting with local officials to evaluate the risk to new facilities in the vicinity of BGAD with potentially vulnerable populations. Based on these discussions, FEMA and the USACE will determine the need to enhance protection at the facilities.

Because the equipment that enables over-pressurization of a facility is integrated into heating and ventilation systems, its removal during program closeout has posed challenges in the past. In particular, schools and hospitals cannot simply shut down to allow removal of over-pressurization equipment. FEMA plans to provide technical assistance to address these issues at the end of the program.

### **Emergency Responders**

According to CSEPP policy, off-post emergency responders should never enter the chemical threat area identified by the hazard model. As an added precaution, CSEPP continues to provide PPE ensembles (e.g., chemical protective suits, powered air-purifying respirators, gloves, and boots) and the associated mandatory training to response personnel, including those who, for example, manage traffic and access control points. Should there be a shift in the hazard area due to weather conditions, this equipment can be used as an escape ensemble by these workers. To date, more than 5,000 protective equipment ensembles have been provided to protect CSEPP's emergency workers.

## Public Outreach and Education



CSEPP public outreach and education is a critical function of a robust emergency management system. CSEPP funds public information officers (PIOs) at the State level in Colorado and Kentucky and in the counties closest to the stockpiles. PIOs have two primary responsibilities: to conduct public outreach and education programs to ensure residents know what to do in the event of a chemical accident and to maintain an emergency public information capability to provide instructions to residents during an emergency. CSEPP provided training throughout the fiscal year consisting of program-specific instruction delivered in CSEPP communities. PIOs also teach FEMA local-level public information courses in their communities.

The CSEPP Public Affairs Integrated Process Team (PA IPT) examines cross-cutting public affairs issues at the two CSEPP sites. The PA IPT is a source of ideas for each community to draw upon for best practices and lessons learned. During PA IPT meetings, PIOs provide case studies of actual emergencies and review the results of CSEPP exercises. During the fiscal year, the PA IPT is focused on developing IPAWS messaging and evaluating the December IPAWS test to see how different technologies displayed emergency messages.

“Prepare Pueblo” in Colorado and “Prepare KY” in Kentucky are public education programs with locally maintained websites that provide CSEPP emergency information to residents. CSEPP PIOs strengthen relationships with local stakeholders by engaging the whole community through presentations to schools and civic organizations and by participating in community events. During FY 2015, Colorado and Kentucky PIOs continued to work with persons with LEP—and their local organizations—to identify and provide preparedness information to the LEP community. Both sites make CSEPP outreach materials available in Spanish and English, and Spanish interpreters are available for outreach events and program meetings. Specific details on outreach initiatives in the two communities are located in Appendices A and B.

## Training



During FY 2015, CSEPP classroom training was conducted at state and local levels for participants from the CSEPP communities, as well as personnel from other Federal, state, and local agencies involved in homeland security. CSEPP training is shared with many other communities across the United States in hardcopy formats and through various partner websites.

Available CSEPP classroom training courses encompass the following topics:

- CSEPP orientation and chemical awareness;
- Use of antidote auto-injectors by civilian emergency medical personnel;
- Decontamination and use of PPE;

- Physician/emergency medical training;
- CSEPP JIC/JIS;
- CSEPP information and communication technology;
- CSEPP advanced information and communication technology;
- CSEPP spokesperson training;
- CSEPP photography/video in social media formats; and
- DHS Basic Planners Course.

In conjunction with FEMA's Emergency Management Institute, CSEPP is piloting training on the facilitation of inter-jurisdictional teams. Initially, this course has been offered only in the two CSEPP communities. Additional pilot offerings are being scheduled for FY 2016, but work continues to transition the class to the FEMA training curriculum with an assigned course number.

CSEPP continues to sponsor first responder and first receiver training where continuing education units or continuing medical education units were awarded to those who successfully completed the training. Other training efforts that provide long-term and post-CSEPP benefits to the communities include FEMA's Master Exercise Practitioner Program (MEPP), and public affairs and medical training. CSEPP has now sponsored three iterations of MEPP. This nationally-recognized program has prepared local community emergency officials in designing, testing, and evaluating their ability to respond to all-hazards events. There are 149 MEPP graduates within the CSEPP communities who continue to provide a strong local foundation for planning, conducting, and evaluating not only CSEPP but also all-hazards exercises.

## VI. Conclusion

Over the last fiscal year, FEMA continued its mission to assist communities near the two remaining chemical stockpile sites. Working closely with its Army and state and local partners, FEMA continued to meet its program goals, with notable improvements in EOCs, interoperable communications systems, and public alert and notification systems. Although these three areas were priorities for the program, existing capabilities under all 12 benchmarks were maintained, and in some cases enhanced, during the fiscal year. CSEPP is positioned to continue its preparedness mission as the Blue Grass and Pueblo sites enter the chemical weapons destruction phase.

A cornerstone of CSEPP is the sharing of best practices, resources, and expertise among all CSEPP communities. This includes the ongoing use of IPTs, in the communities and programmatically, which remain critical to the successful advancement of CSEPP goals and the resolution of new challenges. For example, the participation of community representatives on the functional IPTs and working groups has promoted the spread of initiatives ranging from planning and tracking employee training to conducting multimedia public outreach programs to evaluating exercises to timely alerting of the public.

Looking forward, FY 2016 will once again be a pivotal year as full-scale agent destruction operations are scheduled to begin at the PCD and systemization efforts lay the groundwork for similar activities at BGAD in the following years. Current construction projects in Kentucky will be completed and community stakeholders will be occupying new facilities, employing new communication systems, and continuing emergency planning and outreach activities. FEMA will continue to support the enhancement and review of response capabilities in Madison County, KY, where, by State law, the ability of the community to effectively respond to releases from the facility to protect public health and the environment must be assured prior to State issuance of a permit allowing the Army to destroy chemical agent. FEMA remains committed to ensuring the two remaining CSEPP communities are fully prepared to respond to an accident involving the chemical stockpile. This commitment will continue until the stockpile is eliminated.

### **New Pueblo County Emergency Operations Center to Serve as Backup for the State of Colorado**

Emergency operations centers (EOCs) are integral to implementing disaster response plans, coordinating resources, and serving as the central location for agencies involved in a response. During FY 2014, a new Emergency Operations Center opened in Pueblo County, CO, supported by funding and technical assistance from FEMA.

Last year, the Pueblo County Sheriff and the State of Colorado reached an agreement that the new Pueblo EOC will serve as a backup State EOC. Under this memorandum of understanding, if needed, State emergency personnel would relocate to the Pueblo EOC and perform the necessary functions that would normally be conducted in their primary EOC. "Having a functional backup EOC is important for the State in the event we are unable to occupy our primary facility in Centennial, Colorado," said Micki Trost from the Colorado Division of Homeland Security and Emergency Management.

Pueblo County and State emergency personnel routinely train together and coordinate other preparedness activities. "We have such a close working relationship with the State that having our EOC serve as a backup is a natural extension of our planning," said Pueblo County Sheriff Kirk M. Taylor.

The State and county actively participated in the planning and conduct of the annual CSEPP Exercise, where capabilities of the two EOCs were demonstrated and evaluated. In March 2015, the State conducted a separate exercise in the Pueblo EOC to test the connectivity and functions that the State would use if personnel needed to relocate from Centennial to Pueblo. During both exercises, the State and county effectively demonstrated the capabilities of their respective EOCs.



## Appendix A: Colorado

The Pueblo Chemical Depot (PCD) is located approximately 14 miles east of Pueblo, CO, where chemical weapons have been safely stored since the 1950s. The depot occupies 23,000 acres and stores 8.5 percent of the original U.S. chemical weapons stockpile in the form of mustard blister agent housed in mortars and projectiles.

Destruction of the stockpile is the responsibility of the DoD's Program Executive Office, Assembled Chemical Weapons Alternatives (PEO ACWA), which oversees the Pueblo Chemical Agent-Destruction Pilot Plant (PCAPP). The PCAPP team completed construction in December 2012. Currently, PCAPP systemization is underway. Systemization encompasses all the planning, technical work, training, and testing activities required to ensure that destruction operations will run safely and smoothly. Destruction activities at PCAPP are expected to begin in FY 2016.

The Army's EDS was implemented at PCD this fiscal year and is being used to augment the PCAPP destruction operations. EDS is destroying a number of problematic chemical munitions that cannot be easily processed through the PCAPP. These include munitions that have leaked in the past and are now over-packed, as well as "rejects," whose deteriorated physical condition does not easily allow for automated processing. PCD shares daily work plans, highlighting weather conditions, planned activities, and associated hazards, with FEMA, State of Colorado, and Pueblo County staff, enhancing the situational awareness of depot operations by off-post emergency personnel.

In addition to Federal partners, CSEPP in the Pueblo community comprises the State of Colorado, Pueblo County, and the Pueblo City-County Health Department.

Listed below are the most significant accomplishments of the year as reported by the Pueblo CSEPP community.

## Fiscal Year 2015 Accomplishments

### Administration

The Pueblo CSEPP community maintained compliance with all 12 benchmarks in FY 2015. Figure 4 illustrates total CSEPP expenditures (grant dollars and Federal technical support) to support preparedness in Colorado during the last three fiscal years.

### Alert and Notification

Colorado CSEPP is a major component of efforts to implement IPAWS at the State and local level. Existing Pueblo County Emergency Alert System messages were converted to IPAWS formats in preparation for testing at the Joint Interoperability Test Command to validate equipment configurations, message templates, and procedures. In December 2014, the county successfully demonstrated the operability of the local system. Colorado CSEPP continues to actively participate on the CSEPP working groups that are evaluating the test results, inventorying local equipment to determine how different equipment processes IPAWS messages, and identifying areas for future testing. A draft Pueblo County IPAWS Standard Operating Procedure is under review, and the County is also identifying equipment and software products with superior interoperability with IPAWS.

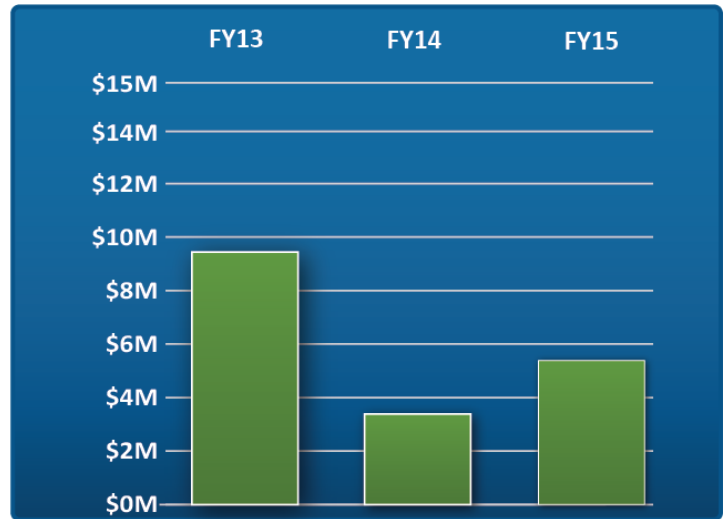


Figure 4: Colorado CSEPP Programmatic Spending

### Automation

The Pueblo CSEPP Automated Manual is an automated tool for quickly capturing notification information from PCD that replaces a paper-based guidebook. The tool automatically generates appropriate EAS messages, and guides dispatch staff as they complete time-sensitive tasks in the initial stages of a CSEPP response. The main purpose of the Automated Manual is to reduce the amount of time between notification of the event and alerting the public while also reducing the chance of error. A significant reduction in public notification time from prior years was achieved during its first use during the FY 2015 PCD Exercise.

### Communications

The multi-year Zone Controller project and five-site simulcast system was successfully completed, enhancing the security of first responders throughout southern Colorado. This technology will allow regional control of emergency responder radios instead of feeding transmissions through the State's offices (while still remaining interoperable with the State system). The project is also intended to eliminate many of the radio "dead spots" that currently exist across the region.

Pueblo County has also upgraded their 911 system to allow for future enhanced features such as receiving 911 messages via text messaging.

### **Coordinated Plans**

The *Colorado CSEPP Recovery Plan*, now a component of the State Emergency Operations Plan, helps local officials lead, organize, plan for, and manage the complex issues of post-disaster recovery under the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), the Robert T. Stafford Disaster Relief and Emergency Assistance Act, and State and local laws. During FY 2014, the community held the first two of five meetings designed to bring together stakeholders to review elements of the Recovery Plan and evaluate its approach. These stakeholders included representatives from various Federal, State, and local agencies and nongovernment organizations. The first two events each had nearly 60 attendees and focused on the new Recovery Plan and command and control, respectively.

The third workshop (Monitoring and Sampling) was conducted on November 18, 2014, in Pueblo. The workshop focused on the monitoring, sampling, and analysis activities that would occur following a chemical accident/incident at PCD. A diverse group of Federal, State, and local stakeholders participated in the workshop, including representatives from CMA, PCD, EPA, U.S. Department of Agriculture (USDA), and FEMA. State participants included the Colorado Department of Public Health and Environment and the Colorado Civil Support Team. Specific topics included the use of downwind hazard plume modeling; how monitoring and sampling are conducted; and how samples would be collected, transported, and processed. The session included a demonstration of monitoring and sampling equipment from the partner agencies.

The fourth workshop (Medical and Community Services) was held on June 9, 2015, in Pueblo. In addition to State and local emergency management officials, representatives from the Pueblo County health department, social services, coroner's office, and animal services departments participated, as well as mental health and disability organizations, the local American Red Cross chapter, and representatives of PCD and their medical services providers. The workshop featured a detailed discussion on the pre-hospital treatment that a patient would receive at PCD prior to transport to a hospital, as well as an overview of hospital treatment. Social services providers presented details on the behavioral and spiritual health needs of evacuees with an emphasis on pre-planning for people with disabilities. The American Red Cross representatives presented specifics on the transition from response to recovery.

The final TTX on August 25, 2015, encompassed the material from all of the previous workshops, providing the six dozen participants with an opportunity to review and validate current CSEPP recovery concepts, plans, and capabilities in response to an emergency at PCD. This discussion-based TTX addressed the recovery role of the Army and dozens of local and State partner agencies and organizations. Players in seven groups engaged in active discussions

of issues associated with command and control, monitoring and sampling, reentry, and health and community services in the days immediately after an incident. Each group then provided a briefing to a plenary session on its discussions.

A hot wash was conducted immediately following the TTX. The results will be reflected in the next version of the *Colorado CSEPP Recovery Plan* and incorporated into the after-action report being prepared for the Colorado CSEPP Recovery Exercise series as a whole. The after-action report will include an executive summary of the series, narratives of lessons learned, and appendices containing samples of the supporting documents.

### **Emergency Operations Centers**

The EOC and JIC at the new Pueblo County Emergency Services Center were fully functional for the annual CSEPP Exercise, which assessed processes and equipment in the new EOC. In FY 2015, the Pueblo County Sheriff and State of Colorado officials completed an agreement that the Pueblo County EOC will serve as a backup to the State facility if needed (see page 25). During the year, State emergency management personnel traveled to Pueblo and successfully completed a continuity of operations exercise to evaluate the connectivity of the Pueblo EOC with State resources and personnel.

State CSEPP staff supported the preparations for and safe conduct of the 2015 World Alpine Ski Championships. They assisted in the planning, coordination of training, and conduct of exercises to prepare personnel in Eagle County and those from other participating jurisdictions. During the event, CSEPP personnel staffed State and local emergency facilities and coordinated social media monitoring activities by the Colorado Virtual Operations Support Team (COVOST).

### **Exercises**

The Pueblo CSEPP Community Exercise 2015 (PCD Ex 15) was conducted on May 6, 2015, to demonstrate the emergency response capabilities of the Pueblo CSEPP community. Exercise design and planning was accomplished by the Army and FEMA Co-Directors and representatives from PCD, Pueblo County, and the State of Colorado. Off-post participants included State and local emergency management and public safety organizations, amateur radio, a local school district, three local hospitals, BNSF Railway, the American Red Cross, and the Pueblo Behavioral Health Response Team. The scenario consisted of two incidents:

- A forklift accident on-post during the re-warehousing of 4.2-inch mortar rounds containing mustard agent; and
- An unrelated transportation accident off-post involving a collision between a freight train and an anhydrous ammonia tank trailer.

During the exercise, the off-post community demonstrated a full range of response capabilities, including the use of incident command; response coordination between local, State, Federal, and private sector officials; selection and implementation of protective actions for the public,

including schools and other special populations as well as animals; and operation of an evacuation center and shelter with the activation of local and State survivor support services. Local hospitals and field response organizations demonstrated the ability to triage and decontaminate more than 100 potentially contaminated victims. Finally, a joint information center (JIC)/joint information system (JIS) (consisting of local, State, and Federal agency representatives) coordinated and disseminated news releases among multiple jurisdictions, monitored and used social media, conducted a news conference, and responded to public and media inquiries.

A community-wide after-action report, including a corrective action plan, was published on July 10, 2015. Strengths were noted in the areas of shelter management, communications support from amateur radio, animal sheltering, and evacuation. Observations were made to enhance JIC/JIS procedures for developing news releases and to improve local triage protocols following decontamination.

## **Medical**

In conjunction with local emergency responders and medical services, three Pueblo area hospitals (Parkview Medical Center–Main, Parkview-Pueblo West Medical Center, and St. Mary-Corwin Medical Center) participate in CSEPP preparedness activities. CSEPP provides equipment, training, and technical assistance to enhance medical preparedness for pre-hospital care and in-hospital treatment of patients exposed to chemical agents. The program also works with area public safety and health initiatives to enhance integration of the program locally.

During the fiscal year, the following medical provider training was completed:

- Hospital hazardous operations classes;
- ICS refresher (100-, 200-, 700-, 800-level) classes;
- Hospital ICS training for hospital command staff;
- PPE training for fire and law enforcement responders;
- Patient decontamination training for Parkview Medical Center staff;
- Hospital hazardous materials operations; and
- A trauma symposium for first responders.

## **Protective Actions**

CSEPP provides respirator fit testing to members of the fire and law enforcement agencies in Pueblo County, which is done annually in accordance with OSHA regulations. During FY 2015, more than 500 first responders were fit tested.

CSEPP funded an improved intercom system for Avondale Elementary, a school directly south of PCD that actively participates in the program. The system enhances shelter-in-place capabilities by allowing for internal and external communication with video.

### **Public Outreach and Education**

During the fiscal year, the “Prepare Pueblo” campaign continued. This outreach campaign is a blended approach that includes the use of a website, social media, and paid advertising (theater advertisements, chamber of commerce, radio, newspaper, sports event banners, and roadside billboards). Strategy, tactics, and advertisements were developed by the Colorado CSEPP PIO team, capitalizing on CSEPP-provided training.

Message strategy was developed using survey results and lessons learned from other CSEPP sites. The campaign reminds residents of the importance of preparedness at home, work, and school. Specific topics include “planning begins with you,” “know your zone,” “how residents will receive emergency messages,” and “shelter-in-place and evacuation instructions.” During the fiscal year, key messages were developed to educate residents as to how they would get emergency alerts and information and how to learn if a resident lived inside or outside of an emergency zone. Since protective actions differ for those most at risk, it is important to educate residents living inside an emergency planning zone.

Immediately following the start-up of agent operations at PCD in May 2015, local, national, and international news media outlets ran stories on the resumption of chemical agent destruction in the United States. Community PIOs coordinated closely with DoD public affairs officers to ensure that consistent messages were delivered to the public. In addition, Pueblo County and PCD public affairs officers collaborated to produce a video highlighting the coordination between the PCD and Pueblo County EOCs. The video provides an overview of the personnel, procedures, and equipment that enable open channels of communications between the on-post and off-post communities.

The Pueblo County CSEPP PIO continued to maintain a cadre of trained individuals, known as the Risk Communication Network, to help with disasters. The 40 members of this network were recruited from public safety organizations; not-for-profit organizations; hospitals; the business community; and Federal, State, and county agencies. CSEPP offered members specific training to further develop skills relating to their service as PIOs. In addition to participating in CSEPP training and annual exercises, Risk Communication Network members have deployed to assist with other emergencies in their community and in neighboring counties.

The team provided FEMA local-level G290: Basic Public Information Officer training courses at least once a month between October 2014 and September 2015 across the State for nearly 400 people. In addition to being offered in Pueblo County, the course enables the State CSEPP PIO to build important relationships with other PIOs that are essential for maintaining an efficient JIS.

## **Training**

FY 2015 was again a busy year for training in Pueblo. Through more than a dozen CSEPP-sponsored courses, 936 community participants received training on topics ranging across basic and advanced incident command, hazardous materials response, exercise design and evaluation, emergency planning, public affairs, and continuity of operations.

## **Future Planning**

The start of agent destruction operations marked the beginning of the end of CSEPP in Colorado. As a result, the Community IPT established a closeout working group to develop a closeout strategy that encompasses budgetary and programmatic issues for each of the jurisdictions in the Colorado CSEPP community. The working group includes representatives from the organizations participating in the IPT. Meetings and teleconferences of the working group are held in conjunction with the Community IPT meeting. Specific items discussed this year include State and local personnel, disposition of equipment, closeout milestones, and planning for the final exercise. In addition to its traditional coordination role, FEMA provides technical assistance, including best practices from the six previous site closeouts, to assist with Pueblo closeout planning.

## Partnering with Universities to Improve Preparedness

Central Kentucky is home to several universities and colleges, and their faculty, staff, and students are important stakeholders for CSEPP emergency planners and public information officers. Since the beginning of the Kentucky CSEPP, Madison County, home to the Blue Grass Army Depot, has coordinated closely with Eastern Kentucky University (EKU) in Richmond and Berea College in the city of Berea to coordinate emergency planning for the two campuses. CSEPP public information officers also assist with new student orientation programs to ensure incoming students receive emergency information.

In addition to the CSEPP counties providing information to the universities and assisting with emergency planning, the counties receive assistance from the universities. On September 16, 2015, almost two dozen students from EKU participated in the annual CSEPP Exercise. These students, many of whom are studying emergency management, participated in the simulation cell of the exercise. Here, the students role-played members of the public or other government agencies, calling exercise participants with scripted questions or concerns, referred to as exercise injects. The students also recorded how county or State emergency personnel responded to each inject. This exercise provided needed resources for the exercise planners, and the students received hands-on experience in an actual FEMA-evaluated exercise. Three other examples of this cooperation include:

- Sixty-two students from the EKU School of Nursing participated in medical-related exercise activities.
- Clark County, KY has a student from EKU gaining practical work experience as an intern in the county EOC.
- From June 1 to 5, 2015, emergency planners from EKU and the University of Kentucky in Lexington participated in the CSEPP-sponsored DHS National Planner's Course held in Richmond, KY.

Partnering with universities to provide public outreach, coordinate emergency planning, and conduct training and exercises are best practices that assist in ensuring the whole community is prepared for a chemical emergency.



## Appendix B: Kentucky

Blue Grass Army Depot is located south of Lexington, KY, near the city of Richmond. The depot sits on 15,000 acres. The stockpile is maintained on 255 acres of land near the northern border of the depot. Storage of blister agents began in 1944, and nerve agent storage commenced in the mid-1960s. The safe storage of the chemical stockpile remains an important mission of the Blue Grass Chemical Activity.

Destruction of the stockpile is the responsibility of DoD's PEO ACWA. Construction of the Blue Grass Chemical Agent–Destruction Pilot Plant (BGCAPP), which is being built to destroy the stockpile of nerve agent weapons currently in storage at Blue Grass, is nearly complete. The plant will use neutralization followed by supercritical water oxidation to destroy the site's nerve agents. The next project stage, known as systemization, is underway. Systemization encompasses all the planning, technical work, training, and testing activities required to ensure that destruction operations will run safely and smoothly.

Construction is also underway for the facilities that will support the use of an Explosive Destruction Technology (EDT) system at BGAD. The EDT system will safely resolve a significant challenge by destroying the entire mustard stockpile. The system selected by the DoD was the Static Detonation Chamber (SDC). The SDC uses electrically-generated heat to detonate the munitions, thus destroying the mustard agent and energetics (explosives).

In addition to Federal partners, the Blue Grass CSEPP community comprises the Commonwealth of Kentucky; Madison, Estill, Clark, Garrard, Rockcastle, Powell, Laurel, Jackson, and Jessamine counties; and the Lexington-Fayette County Urban County Government (LFUCG).

The Kentucky CSEPP community includes ten counties that have distinct planning zones. CSEPP zones are geographical areas around the chemical depot defining the areas that are included in the preparedness activities. Zones most at risk from a chemical release are referred to as IRZs; these are located in Madison and Estill counties, which are thus referred to as IRZ counties. Zones farther out from the hazard are designated as PAZs; Clark, Garrard, Rockcastle, Powell, and Jackson counties and the LFUCG contain some PAZ areas and are thus referred to as PAZ counties. Laurel and Jessamine counties are designated as host jurisdictions. A host jurisdiction is not considered to be at direct risk from a chemical stockpile accident, but provides decontamination and medical treatment, mass care, host facilities, and mutual aid support to at-risk jurisdictions.

Listed below are the most significant accomplishments of the year as reported by the Blue Grass CSEPP community.

## Fiscal Year 2015 Accomplishments

### Administration

The Blue Grass CSEPP community maintained compliance with all 12 benchmarks in FY 2015. Figure 5 illustrates total CSEPP expenditures (grant dollars and Federal technical support) to support preparedness in Kentucky during the last three fiscal years.

There was significant activity within the Kentucky CSEPP community during the fiscal year. Through CSEPP, the community is completing the construction and renovation of EOCs, enhancing emergency communication systems, and implementing public outreach activities to inform the public of what to do in the event of a chemical incident. Recognizing the importance of increased cooperation during this period, the community IPT has increased the frequency of coordination activities, including meetings and conference calls.

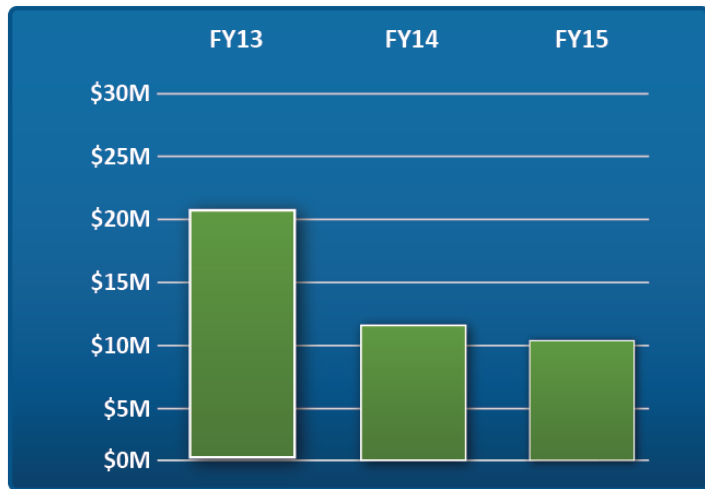


Figure 5: Kentucky CSEPP Programmatic Spending

In FY 2015, Kentucky Emergency Management (KYEM) continued to collaborate with the CSEPP counties to implement a new accounting system that improves visibility of county expenditures to fiscal managers and tracks payments to ensure prompt reimbursements to the counties. On average, the payment processing time for reimbursements from the Commonwealth to the counties continued to improve significantly in FY 2015.

Ensuring CSEPP stakeholders were trained on the new Federal grant regulations at 2 CFR 200 was a priority for the KY CSEPP during the fiscal year. In addition to specific grants management training, FEMA Regional personnel continued site visits to ensure grantees were aware of changes and had an understanding of the grant objectives and guidelines. The Commonwealth continued to maintain a robust sub-recipient financial monitoring program.

### Alert and Notification

Additional communication towers in Kentucky CSEPP counties received enhancements to the grounding of the electrical equipment. Due to the historical frequency of electrical storms, careful grounding of such equipment was essential to protecting the equipment from lightning strikes.

## **IPAWS Implementation**

The Commonwealth of Kentucky continued to participate in a CSEPP-sponsored pilot program to plan and implement IPAWS. The draft *IPAWS Implementation Guide* is currently being used by Laurel and Garrard counties to prepare documents for their IPAWS certificates. KYEM and Fayette County participated in IPAWS testing in December 2014. Several different types of equipment were tested, allowing users to evaluate how IPAWS messages were displayed from different types of equipment. Once each message was sent, they were able to see the message scroll on the monitors and hear messages being read aloud. In addition, objectives were established for the test to provide an opportunity for the participants to become comfortable with the equipment and build confidence in their ability to be able to send an IPAWS alert. CSEPP stakeholders reviewed the test results that included the processing times of messages, the message format, and how existing procedures are used to generate IPAWS messages.

## **Automation**

Kentucky CSEPP counties and the Commonwealth use the same computer software to share emergency preparedness information. The community maintains several working groups to coordinate automation projects within the counties and Commonwealth, including the information sharing software. A working group meets bi-monthly with all product users to plan, coordinate, and resolve problems within their respective communities.

## **Communication**

The Association of Public-Safety Communications Officials Project 25 (P25) repeater replacement project was completed in FY 2014 to meet Federal Communications Commission requirements. During FY 2015, Powell, Estill, Clark, Jackson, and Garrard counties continued to make interoperable communication system improvements. Each county is installing a P25 Radio Voting System, which, when completed, will enhance the ability of individual radio users to connect to the most efficient radio tower on the system.

## **Coordinated Plans**

The Blue Grass CSEPP community planning work group continued the development and promulgation of new County CSEPP incident-specific plans. These hazard-specific plans address detailed response actions to a chemical stockpile emergency and augment State and county all-hazards emergency operations plans. Drafts of the new plans were tested during the FY 2014 exercise and are being finalized based on lessons learned from that exercise. The Blue Grass CSEPP community also initiated the development of a revised Commonwealth incident-specific CSEPP plan and an update to the Blue Grass CSEPP Reentry and Recovery Plan. The Kentucky Reentry and Recovery Working Group held its initial meeting during the fiscal year. The participants are beginning to develop procedures and recommendations for the Governor and county executives to make decisions relating to when people could return to their homes following a chemical incident at BGAD. Kentucky representatives also participated in the

Colorado recovery workshops described in Appendix A. Lessons learned from Colorado are being transferred to Kentucky for inclusion in their recovery planning initiatives.

KY CSEPP is in the final stages of developing an internal mutual aid structure that will allow CSEPP counties to request assistance from one another directly during a chemical emergency. The primary objective is to facilitate rapid, short-term deployment of emergency support prior to, during, and/or after an incident. All of the CSEPP counties drafted incident-specific plans for chemical emergencies during 2015. These plans will be practiced and validated during the annual CSEPP full-scale exercise and revised based on lessons learned. Finalization of the incident-specific plans is expected in FY 2016. The community is also working to finalize animal decontamination procedures, incorporating lessons learned from recent exercises and national best practices, including establishing a policy and procedures for the decontamination of service animals in situations where they cannot be separated from their human partner.

### **Emergency Operations Centers**

#### **Madison County**

Madison County's 25-year-old EOC in Richmond is being expanded and modernized to meet current emergency operation needs. When completed, this project will combine the County 911 dispatch center, emergency operations, and emergency management agency offices in one location. Emergency personnel have temporarily relocated to the backup EOC in Berea so that portions of the existing building could be demolished and new construction occur. The project is expected to be completed and the building operational in FY 2016.

#### **Clark County**

Construction of Clark County's new EOC, which began in September 2013, was completed in FY 2015. Emergency management has occupied the building, and the completion of radio equipment on a new tower is currently underway. The building, which may eventually incorporate the county's 24-hour warning point, was evaluated during the annual exercise.

#### **Garrard County**

The design of the new Garrard County EOC has been completed and construction is underway. The new EOC will provide space to co-locate the 24-hour warning point and 911 Center. The project is expected to be completed in FY 2016.

#### **Lexington-Fayette Urban County Government**

LFUCG is planning an expansion of its EOC, which will be constructed within an existing government building. This renovation will provide a modernized facility to centralize all county emergency communications functions (law enforcement, EMS, 911, fire suppression, hazmat, and public works) with the EOC. Emergency personnel were temporarily relocated to another facility in August 2014, and partial demolition of the current location has been completed. With the design phase finished, construction is currently underway, and the project is expected to be completed next year.

### Rockcastle County

Rockcastle County's new EOC was completed during the fiscal year. A centralized EOC and 911 communications center are operational, and the new facility was used and systems evaluated during the annual exercise.

### Powell County

Powell County completed construction of a new EOC in FY 2014, and the emergency management offices and 911 Center became fully operational during FY 2015. The new EOC, which was evaluated during the annual exercise, is designed for rapid, flexible, and cohesive disaster management. In addition to the emergency management and 911 Center, the facility has a training room, administrative offices, and new technology. In addition to the new EOC, a new communications tower was selected, constructed, and placed in service during FY 2015 to provide radio coverage for areas in Powell and Estill counties.

### Jackson County

Jackson County has completed the design for a new EOC, and construction began in FY 2015. The project is expected to be completed next year.

## Exercises

The Blue Grass CSEPP Community Exercise 2015 (BGAD Ex 15) was conducted on September 16, 2015, to demonstrate the emergency response capabilities of the Blue Grass CSEPP community. Exercise design and planning was accomplished by the Army and FEMA Co-Directors and representatives from BGAD, the Commonwealth of Kentucky, and the ten Kentucky CSEPP counties. Off-post participants included State and local emergency management and public safety organizations, amateur radio, 17 schools in Madison and Estill counties, 13 local hospitals, and the American Red Cross. The scenario consisted of an accident on-post during the inspection of M55 rockets containing nerve agent sarin (GB).

The focus of the exercise was assessing community preparedness in preparation for the start of agent operations in Kentucky. During the exercise, the off-post community demonstrated a full range of response capabilities, including the use of incident command; response coordination between local, State, Federal, and private sector officials; the selection and implementation of protective actions for the public, including schools and other special populations as well as animals; and the operation of reception centers and shelters. The hospitals demonstrated the ability to triage and decontaminate 144 potentially contaminated victims; more than 400 first responders from 60 different State and local agencies participated in similar activities at ten additional field locations. Finally, a joint information center (JIC)/joint information system (JIS) (consisting of local, State, and Federal agency representatives) coordinated and disseminated news releases among multiple jurisdictions, monitored and used social media, conducted a news conference, and responded to public and media inquiries. A community-wide after-action report, including a corrective action plan, will be published in FY 2016.

All Kentucky CSEPP jurisdictions also participated in quarterly BGAD exercises.

## Medical

In addition to numerous first responder and emergency medical service organizations across the ten counties, 14 hospitals participate in CSEPP preparedness activities:

- Baptist Health Richmond and St. Joseph Berea Hospital (Madison County);
- Marcum and Wallace Memorial Hospital (Estill County);
- Clark Regional Medical Center (Clark County);
- Rockcastle Regional Hospital (Rockcastle County);
- Saint Joseph Jessamine Hospital (Jessamine County);
- Saint Joseph of London (Laurel County); and
- Baptist Health Lexington, Eastern State Hospital, St. Joseph Hospital, St. Joseph East Hospital, University of Kentucky HealthCare – Albert B. Chandler Hospital, University of Kentucky HealthCare – Good Samaritan Hospital, and Lexington Veterans Affairs Medical Center (Lexington-Fayette County).

The number of hospitals reflects the demographics of the region and the potential for individuals requiring treatment to evacuate in all directions. CSEPP provides equipment, training, and technical assistance to enhance medical preparedness for pre-hospital care and in-hospital treatment of patients exposed to chemical agents.

The Community IPT has established a Medical Quality Improvement Team (MQIT) to coordinate pre-hospital and hospital care within the participating counties. Currently, the MQIT is supporting the development of a medical capabilities review that will include a self-assessment as well as a review led by the Army PHC.

Led by Madison and Garrard counties, the community has also worked together to reorder supplies of an individual nerve agent antidote from the manufacturer. These pharmaceuticals, which are maintained by local emergency response organizations in addition to the bulk antidote at local hospitals, are currently being restocked in advance of their shelf-life expiration.

## Protective Actions

As a result of population growth, a risk assessment of new Madison County health care facilities, schools, child care centers, and facilities serving people with disabilities and others with access and functional needs was conducted to ensure that these facilities are addressed within the protective action strategy. FEMA has completed the risk assessment and is working with Madison County to determine if any additional protection is needed for the individuals at these facilities.

An analysis of evacuee traffic flow into a primary reception center has also been conducted; the community is working to identify options and alternatives to reduce potential traffic congestion

and delays. Finally, with support from the U.S. Army Corps of Engineers, FEMA is assisting Baptist Health South Hospital to incorporate existing collective protection systems into planned hospital renovations.

Madison County continued to maintain a confidential, protected database that can be used to locate and assist self-identified residents with disabilities or others with access or functional needs during emergencies. The annual emergency calendar provided to each household in the county has instructions for residents who wish to provide information for the database.

The American Red Cross has hired a coordinator to enhance its working relationship with the CSEPP community. This collaboration has led to recent procedural changes, enabling an influx of Red Cross volunteers, including doctors and nurses, to support Red Cross operations in Kentucky.

Nineteen new incident response trailers equipped with programmable message boards (expected to remain in service through the end of CSEPP) have been purchased and are now operational. These trailers can be towed to any location, and placed along a highway or in a parking lot to direct motorists during an emergency. In addition, the number of animal trailers in service across the community was doubled from two to four. These trailers will be deployed to a shelter to help house evacuees' pets. When not in use for an emergency, the trailers will also be used for the care and transport of injured or sick animals.

### **Public Outreach and Education**

The Kentucky CSEPP community has full-time PIOs on staff at the BGAD, Madison County, Estill County, and State CSEPP office. Several other counties have part-time PIOs. The team of public information and public affairs officers engages in a variety of activities to educate residents on what to do in the event of a chemical accident and maintains a capability to deliver emergency public information during disasters.

In FY 2015, the "Prepare KY" public outreach campaign continued the work of informing residents about what to do during an emergency. The campaign maintains the [Prepareky.com](http://Prepareky.com) website that contains all-hazards emergency information and specific CSEPP preparedness information. Community PIOs work together to disseminate CSEPP information at fairs and public meetings, and when other high visibility opportunities are available.

Several printed documents specifically designed to provide CSEPP information to residents were completed during the fiscal year. CSEPP calendars that are printed in English and Spanish are distributed throughout all ten counties in the CSEPP community. The calendars include both CSEPP and all-hazard information and are mailed to residents in the participating communities.

In addition to the calendars, a new CSEPP informational booklet for Jackson and Rockcastle counties was produced for distribution at outreach events throughout the year. A new



community-wide shelter-in-place brochure was also produced that will be distributed to the counties for use in their annual public outreach and education programs.

In addition to direct mail and other printed information, the KY CSEPP community uses social media channels to communicate preparedness information. Following recent emergency declarations for flooding, these social media channels were used to request damage assessments and provide public assistance information. The same channels were also used to communicate emergency information during a hazardous materials incident on I-75 in Madison County.

Measuring residents' knowledge of emergency protective actions is important. KYEM assisted the CSEPP counties in developing a web-based survey to determine how residents receive information and their level of understanding of emergency preparedness. The survey, which was completed in the fiscal year, identified the number of residents who use cell phones or landline telephones and how likely they are to receive outreach messages through social media channels. Specific data were collected on how residents prefer to receive information that will be beneficial in helping to plan future outreach efforts. Specific questions were asked to gauge residents' knowledge of CSEPP-specific emergency preparedness information. Survey results, where applicable, were compared to previous surveys to gauge improvement in resident's knowledge of emergency protective actions and design future outreach activities. In general, the research indicated that 92 percent of the residents in all CSEPP counties are aware of the chemical stockpile and 96 percent of residents are likely to follow emergency instructions during an event.

## **Training**

The KYEM training officer collaborated with the community on fulfilling continuing training needs. A yearly calendar documents available training courses and is distributed to all CSEPP stakeholders. New training tracker software was implemented to manage hazmat, emergency management, search and rescue, and exercise-related training. It maintains real-time status, allowing training coordinators to manage the status of training (scheduled, in-progress, delivered) and to keep accurate documentation. Training coordinators can also upload course-specific documentation, track student registration/course completion, compare budgeted and actual training costs, and review a task checklist for training class hosts.

Throughout the year, several Kentucky CSEPP counties completed major capital projects and began operations in their new emergency facilities. Significant training has occurred as the emergency operations staffs prepared to operate in their new EOCs. This process will continue in FY 2016 as the remaining jurisdictions complete their new facilities.



## **Appendix C: CSEPP Stakeholders**

### **State of Colorado**

- Pueblo Chemical Depot
- Colorado Division of Homeland Security and Emergency Management
- Pueblo County (IRZ)
- Pueblo City-County Health Department

### **Commonwealth of Kentucky**

- Blue Grass Army Depot
- Kentucky Division of Emergency Management
- Clark County (PAZ)
- Estill County (IRZ)
- Fayette County (PAZ)
- Garrard County (PAZ)
- Jackson County (PAZ)
- Jessamine County (Host)
- Laurel County (Host)
- Madison County (IRZ)
- Powell County (PAZ)
- Rockcastle County (PAZ)

## Appendix D: Abbreviations

ACWA	Assembled Chemical Weapons Alternatives
BGAD	Blue Grass Army Depot
BGAD Ex 15	Blue Grass CSEPP Community Exercise 2015
BGCAPP	Blue Grass Chemical Agent–Destruction Pilot Plant
CA	Cooperative Agreement
CAP	Common Alerting Protocol
CDC	Centers for Disease Control and Prevention
CFR	Code of Federal Regulations
CMA	U.S. Army Chemical Materials Activity
COVOST	Colorado Virtual Operations Support Team
CSEPP	Chemical Stockpile Emergency Preparedness Program
CTUIR	Confederated Tribes of the Umatilla Indian Reservation
DHS	U.S. Department of Homeland Security
DoD	U.S. Department of Defense
EAS	Emergency Alert System
EDS	U.S. Army Explosive Destruction System
EDT	Explosive Destruction Technology
EKU	Eastern Kentucky University
EMS	Emergency Medical Services
ENS	Emergency Notification System
EOC	Emergency Operations Center
EOPT	Emergency Operations Planning Template
EPA	U.S. Environmental Protection Agency
EPZ	Emergency Planning Zone
FEMA	Federal Emergency Management Agency
FY	Fiscal Year
hazmat	Hazardous Materials
HSEEP	Homeland Security Exercise and Evaluation Program
ICS	Incident Command System
IPAWS	Integrated Public Alert and Warning System
IPT	Integrated Process Team
IRZ	Immediate Response Zone
ISP	Incident-Specific Plan
JIC	Joint Information Center
JIS	Joint Information System
JITC	Joint Interoperability Test Command
KYEM	Kentucky Emergency Management
LCCE	Lifecycle Cost Estimate
LEP	Limited English Proficiency
LFUCG	Lexington-Fayette County Urban County Government

MEPP	Master Exercise Practitioner Program
MOU	Memorandum of Understanding
MQIT	Medical Quality Improvement Team
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NIMS	National Incident Management System
OSHA	Occupational Safety and Health Administration
P25	Association of Public-Safety Communications Officials Project 25
PA	Public Affairs
PA IPT	CSEPP Public Affairs Integrated Process Team
PAZ	Protective Action Zone
PCAPP	Pueblo Chemical Agent–Destruction Pilot Plant
PCD	Pueblo Chemical Depot
PCD Ex 15	Pueblo CSEPP Community Exercise 2015
PEL	Permissible Exposure Limit
PEO	Program Executive Office
PHC	U.S. Army Public Health Center
PIO	Public Information Officer
PMO	IPAWS Program Management Office
REPP	Radiological Emergency Preparedness Program
SDC	Static Detonation Chamber
SMS	Short Message Service
U.S.C.	United States Code
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture



Homeland  
Security